

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000722**Date Inspected:** 24-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Zhu Zhonghai		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No
<b>Rod Oven in Use:</b>	Yes	No
<b>Weld Procedures Followed:</b>	Yes	No
<b>Verified Joint Fit-up:</b>	Yes	No
<b>Approved WPS:</b>	Yes	No
<b>Delayed / Cancelled:</b>	Yes	No

**Bridge No:** 34-0006**Component:** 89 Meter Mock-Up**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Roscoe Dixon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following. This QA Inspector, Roscoe Dixon randomly observed ZPMC personnel carbon air arc gouging of the 89 Meter Mock-Up longitudinal plate stiffeners identified as piece marks mp534-C1, mp535-A1 and mp538-A1. The QA Inspector also witnessed the in process welding of two lifting lugs onto the 89 Meter Mock-Up Skin E piece mark mp502-1. The ZPMC Certified Welding Inspector (CWI) Zhu Zhonghai informed the QA Inspector the approved welding procedure specification WPS-13-P-2112 was being followed to perform the welding. The ZPMC approved qualified welder Han Xiaofeng ID # 05446 was utilizing Shielded Metal Arc Welding (SMAW) process 5.0mm diameter electrode designated as E7018. This QA Inspector observed the ZPMC Quality Control (QC) personnel An Qingxiang Chin check the welding machine amperes at 210 and 27 volts using a voltage meter, This QA Inspector Dixon also performed random verification of the weld parameters using a Fluke meter. This QA Inspector visually verified the above listed approved WPS, which was posted near the welding operation and determined that the welding and work being performed on the items listed above appeared to comply with WPS and the contract documents. See photographs below to provide additional detail.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

As noted above and basic communication between QC Inspector and QA inspector when and where welding inspections are to be performed.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Dixon,Roscoe

Quality Assurance Inspector

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**Reviewed By:** Cochran,Jim

QA Reviewer